

09/718,679

**AMENDMENTS TO THE SPECIFICATION:**

In response to the specification objection, Applicant submits the following replacement paragraph for page 10, line 3 through page 11, line 6 of the specification:

Figure 1 shows a sample *lwnd* evolution for k-SACK for a case with a *k*-value of 2'. The system window increases rapidly in the slow start phase (1) until it reaches '*ssthresh*'. At this stage the system switches to 'congestion avoidance' phase and the window increases slowly (2). When a single packet loss event occurs 'event 1', the system enters 'halt growth' phase (3). In this state the sender continues in fast recovery but does not change the loss-window '*lwnd*' and slow start threshold '*ssthresh*' values. This situation continues up to 'event 3' i.e. single loss recovered. At this point all the lost packets have been recovered and the system reverts to 'congestion avoidance' phase (4). When another packet loss is detected, the system once again enters the 'halt growth' phase (5) and maintains until 'event 2' i.e. two losses detected. At this point the packet losses equal the '*k*' factor and therefore the system goes into the 'k-recovery' phase (6). In this phase the loss-window '*lwnd*' and '*ssthresh*' are immediately decreased to half the current '*lwnd*' value. The loss-window growth continues from this point and the system remains in 'k-recovery' phase until 'event 1' once again occurs at which point the system enters halt growth phase (7). The system remains in this phase until 'event 3' at which point the packet losses losses have once again been recovered and the system enters 'congestion avoidance' phase (8). At (9) another 'event 1' occurs and the system reverts to 'halt growth'. This state is maintained until 'event 3' occurs and the system reverts to 'congestion avoidance' phase (10). Another 'event 1' occurs at (11) and takes the system into 'halt growth' phase which is maintained until (12) when an 'event 3' results in the recovery of loss packets and brings the system back to 'congestion avoidance' phase. At (13) an 'event 2' (loss of two packets) occurs and causes the system to go into 'k-recover' phase. The loss window once again collapses to half the current value and the '*ssthresh*' is adjusted to become equal to new '*lwnd*'. Another 'event 3' occurs at (14) and brings to system onto 'halt growth' phase until the occurrence of another event 3 at (15) results in full

09/718,679

recovery and reverts it to 'congestion avoidance' phase. Finally, an 'event 1' at (16) reverts the system to 'halt growth' phase.

The Applicant has amended Figure 2 in response to the specification objection (see Amendments To The Drawings (below)).

The Applicant also submits the following replacement paragraph for page 12, lines 15-23:

Whenever the lookahead loss is found to be greater than '0' but less than 'k' the system moves to the 'halt growth' phase (2.8). Once in the 'halt-growth' phase the source checks for acknowledgement (2.9). If no acknowledgement is received the system checks for a timeout condition (2.10). If a timeout is detected the system reverts to SS/CA phase. If no time out is detected the system reverts to check for acknowledgement (2.9). Once an acknowledgement is received the system the system computes the lookahead loss (2.11). If the lookahead loss is '0' the fast recovery is complete ~~(2.13)~~ (2.12) and the source reenters the SS/CA phase (2.1) else it once again compares the lookahead loss with 'k' (2.7).

The Applicant further submits the following replacement paragraph for page 14, lines 5-6:

Once in the 'K' state the system remains in ~~that state~~ that state until packet loss  $\geq$  'k', the system transition to the 'O' state and while doing so  $k_{recovery} = 0$ , no loss is detected.